MAIL STOP APPEAL BRIEF
PATENT
8017-1105

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Taro FUJII et al. Appeal No. _____

Application No. 10/694,822 Group 2183

Filed October 29, 2003 Examiner B. Johnson

ARRAY-TYPE PROCESSOR HAVING PLURAL PROCESSOR ELEMENTS CONTROLLED BY A STATE CONTROL UNIT

REPLY BRIEF

MAY IT PLEASE YOUR HONORS:

As set forth in the Appeal Brief submitted December 1, 2008, there are three issues.

This Reply Brief addresses the first and second issues, 1) whether claim 9 would have been obvious, in the meaning of 35 USC §103(a), based on KATSUKI et al. in view of common art, and 2) whether claims 15, 21, 23-25, 30, 32, 33 and 35 would have been obvious, in the meaning of 35 USC §103(a), based on KATSUKI in view of STOKES et al. are further argued below. The arguments as to the third issue stand as set forth in the Appeal Brief.

I. With respect to the first issue, the Examiner's position is that it would have been obvious to modify KATSUKI to have a central control unit surrounded by a plurality of state control units in order to minimize the wire distance and overall size of the device (Examiner's Answer page 13).

However, KATSUKI teaches away from a central control unit surrounded by a plurality of state control units.

Column 3, lines 8-20 in discussing the prior art recognizes that arbitration was previously based on centralized control systems or distributed systems. KATSUKI teaches away from both of these systems in favor of his new bus system.

That is, KATSUKI teaches that the prior art systems produce unacceptable results, which is the very antithesis of obviousness.

Moreover, the Examiner's contention that the recited central control unit does not centralize the data for uniform distribution is unfounded.

Page 22, lines 3-5 of the present application recites: "Distributing event data from central control unit 155 to all state control units 101 facilitates the realization of uniform linked operation in all state control units 101." Emphasis added.

Accordingly, not only does KATSUKI teaches away from a central control unit, but also the system of KATSUKI could not be modified to a central control unit without changing the principle of operation of KATSUKI.

That is, as set forth in the Appeal Brief (page 7, line 21 to page 9, line 2) KATSUKI could not be modified to a central control unit that facilitates the realization of uniform linked operation because KATSUKI uses a dual bus structure with first and second bus structures that are different from each other. The

first bus structure transfers data for two immediately adjacent processor units and the second bus structure is for processor units that are beyond the third nearest ones in order to provide a flexible data transfer.

These two different bus structures are opposed to a central control unit in order to provide a flexible data transfer.

In view of this, one of ordinary skill in the art would not modify KATSUKI in the manner suggested because KATSUKI teaches away from such configuration and because one of ordinary skill in the art would not be motivated to change the principle of operation of KATSUKI.

Accordingly, the teachings of the references are not sufficient to render the claims *prima facie* obvious.

II. With respect to the second issue and claim 15, the Examiner's Answer states that a reference "teaches away" when it states that something cannot be done (page 16, last 5 lines).

However, neither *in re Gurley* offered in the Examiner's Answer in support of this assertion nor any other source uses such a definition of "teaches away".

Rather, a proper use of "teaches away" is based on a disclosure that criticizes, discredits, or otherwise discourages the solution claimed. *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

In the present case, KATSUKI clearly criticizes, discredits, or otherwise discourages other than a one-to-one correspondence between processor units and control/memory units by pointing out the disadvantages of having multiple processors for one state control unit (see column 3, line 20 to column 5, line 29).

Moreover, as the entire disclosure of KATSUKI describes a bus structure that acts to form pairs of processor units and control/memory units in a one-to-one correspondence (see column 6, lines 10-12 and lines 32-34; column 5, lines 32-37, "This invention is embodied in a bus structure … comprising a processor … and a control/memory section … corresponding one-to-one to the aforementioned processor"; and claims 1 and 14), a modification to a multiple processor and one control unit would change the function of KATSUKI.

In view of the above, it is believed to be apparent that the entire disclosure of KATSUKI is explicitly limited to and thus, based on the basic principle of operation of a one-to-one correspondence between a control unit and a processor and could not be modified without changing the principle of operation of KATSUKI.

Accordingly, the teachings of the references are not sufficient to render the claims *prima facie* obvious.

With respect to the second issue and claim 21, claim 21 includes a similar feature to that of claim 15 and recites that the multiplicity of processor elements is divided into a number of element areas corresponding to the number of state control units. The number of element areas being less than the multiplicity of processor elements.

As set forth above, KATSUKI clearly requires a one-to-one correspondence between processor units and control units.

The conclusion that it would have been obvious to modify KATSUKI to other than a one-to-one relationship between element areas/state control units and processor elements is not supported by the disclosure of KATSUKI.

Accordingly, reversal of the rejections set forth by the Examiner is respectfully requested.

Respectfully submitted,

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